

A Bibliographic Search System with a Focus on the User 's Knowledge Structure

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A Bibliographic Search System with a Focus on the User's Knowledge Structure

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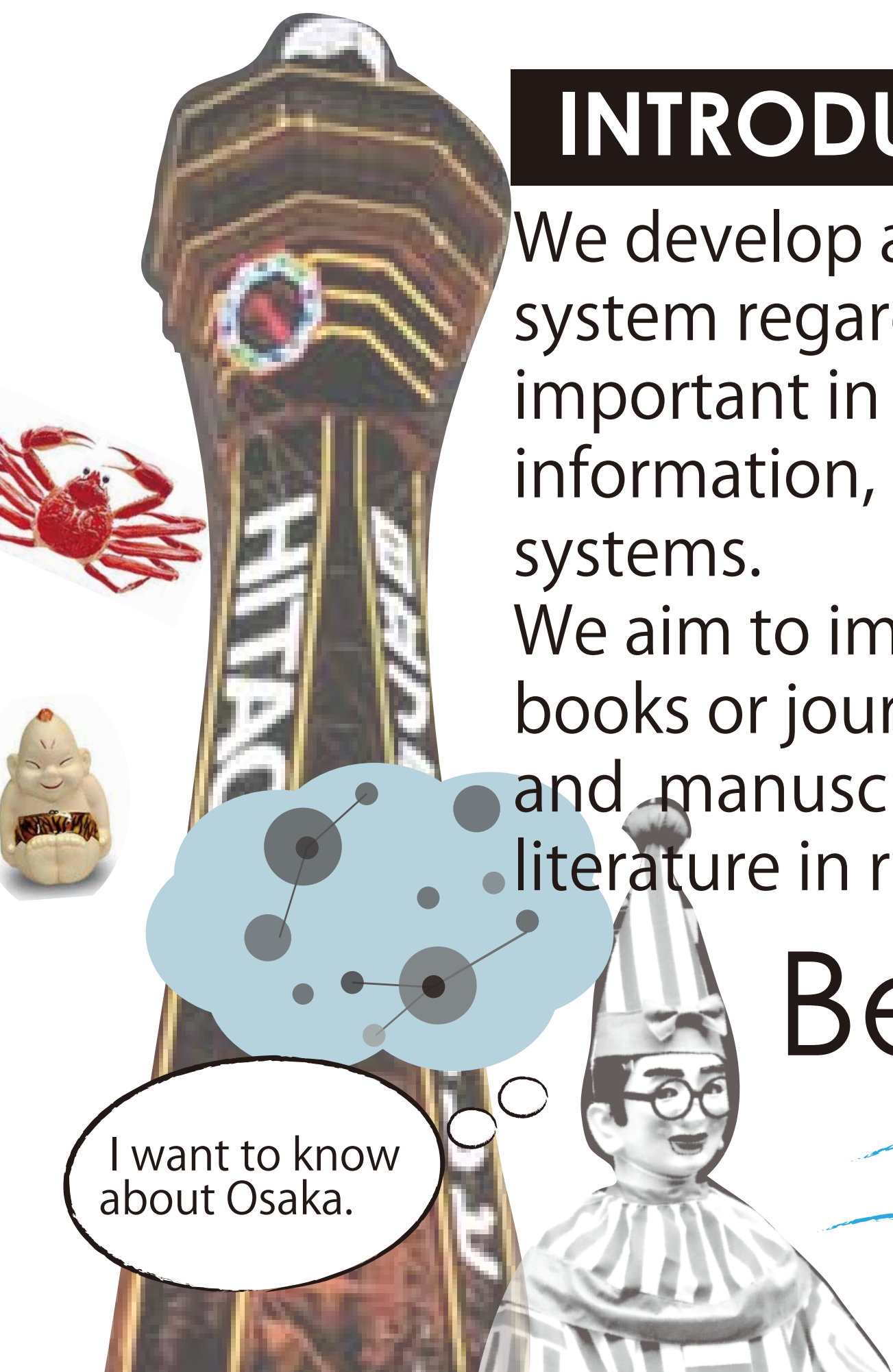
INTRODUCTION

We develop a bibliographic search system regarding expertise as important in searching for subject information, and built two prototype systems.
We aim to improve the access to the books or journals in university libraries and manuscripts of Japanese classical literature in research institutions.

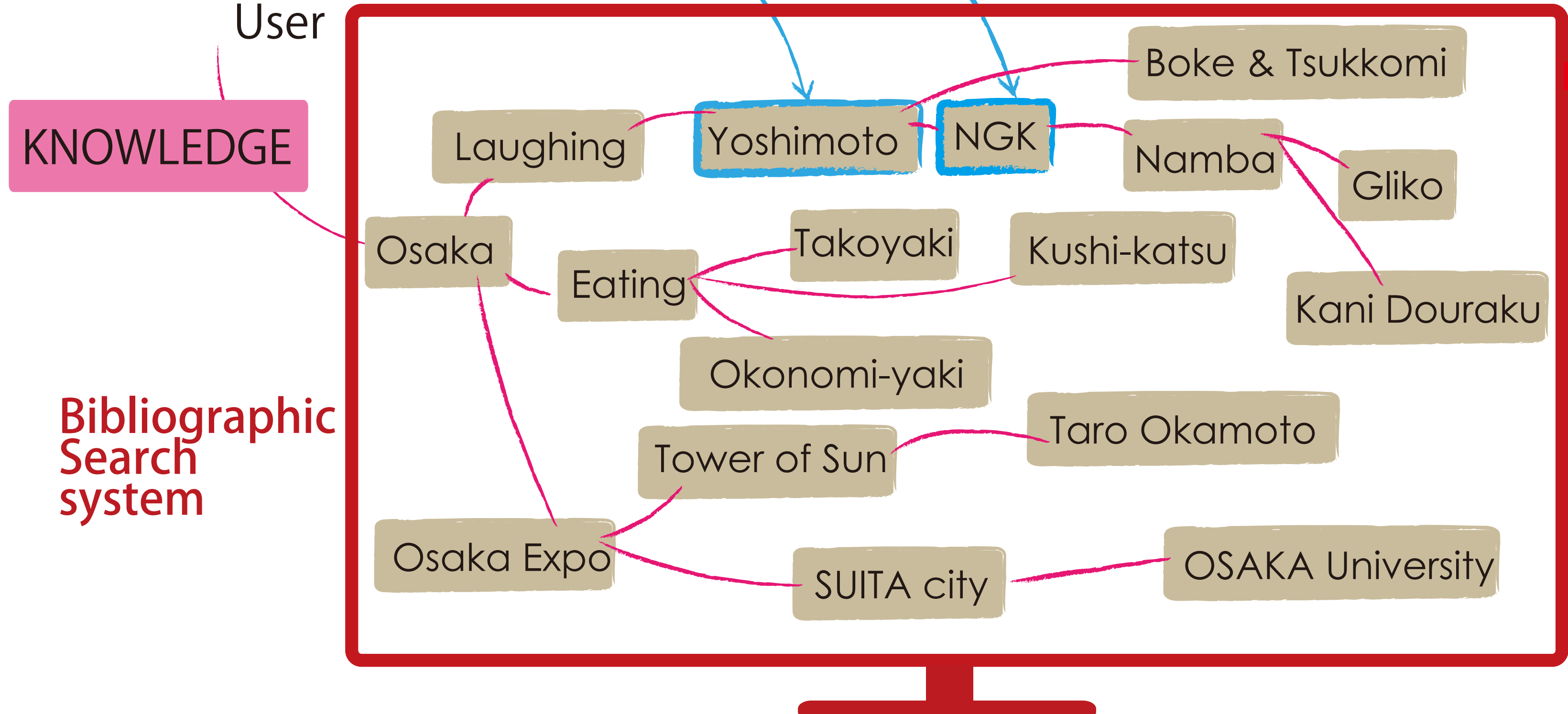
IDEA

We focus on the user's knowledge structure to satisfy information requests more efficiently. We do not use the natural language processing approach. The reason is that the natural language processing is based on processing the terms in literature statistically, and does not consider users' knowledge. However, the act of bibliographic search is a process that satisfies the user's information request, and it is apparent that it has an intimate relationship with the user's knowledge structure.

Before



INDEX INDEX



After



METHODOLOGY

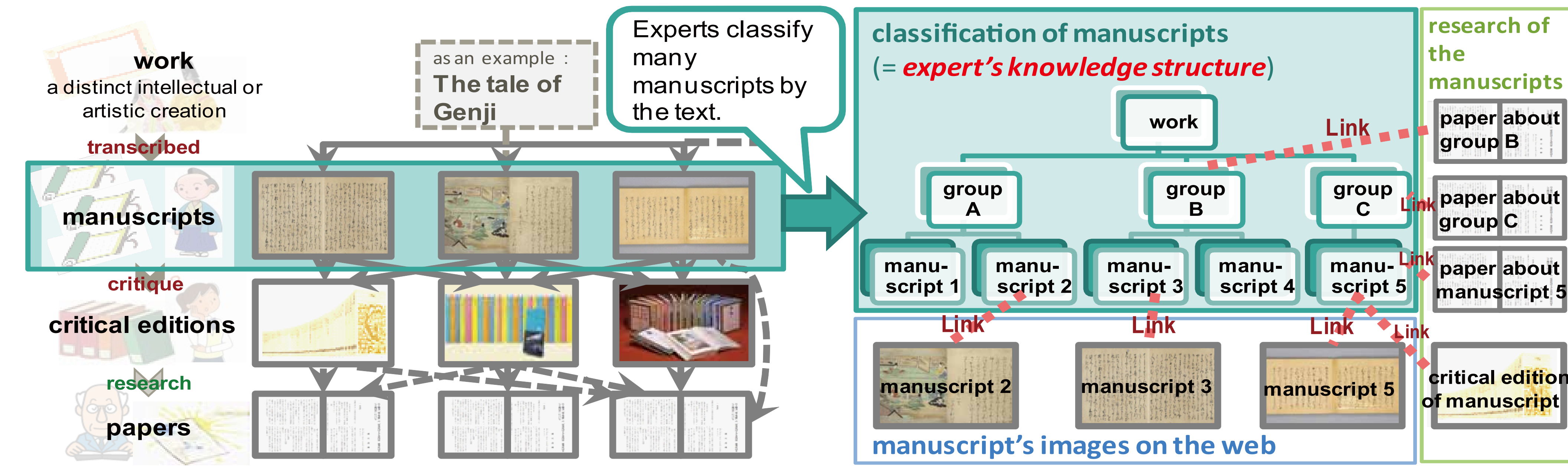
This research proposes a bibliographic search method with a focus on the change in the user's knowledge structure.
The basic idea of this method is as follows:
It is namely an idea that change occurs to the user's knowledge structure before and after a bibliographic search and what affects the change is the information the system presents.
And the state of a successful bibliographic search is defined as the state where the user's knowledge structure and the knowledge system contained in the search results are consistent.

PROTOTYPE SYSTEM

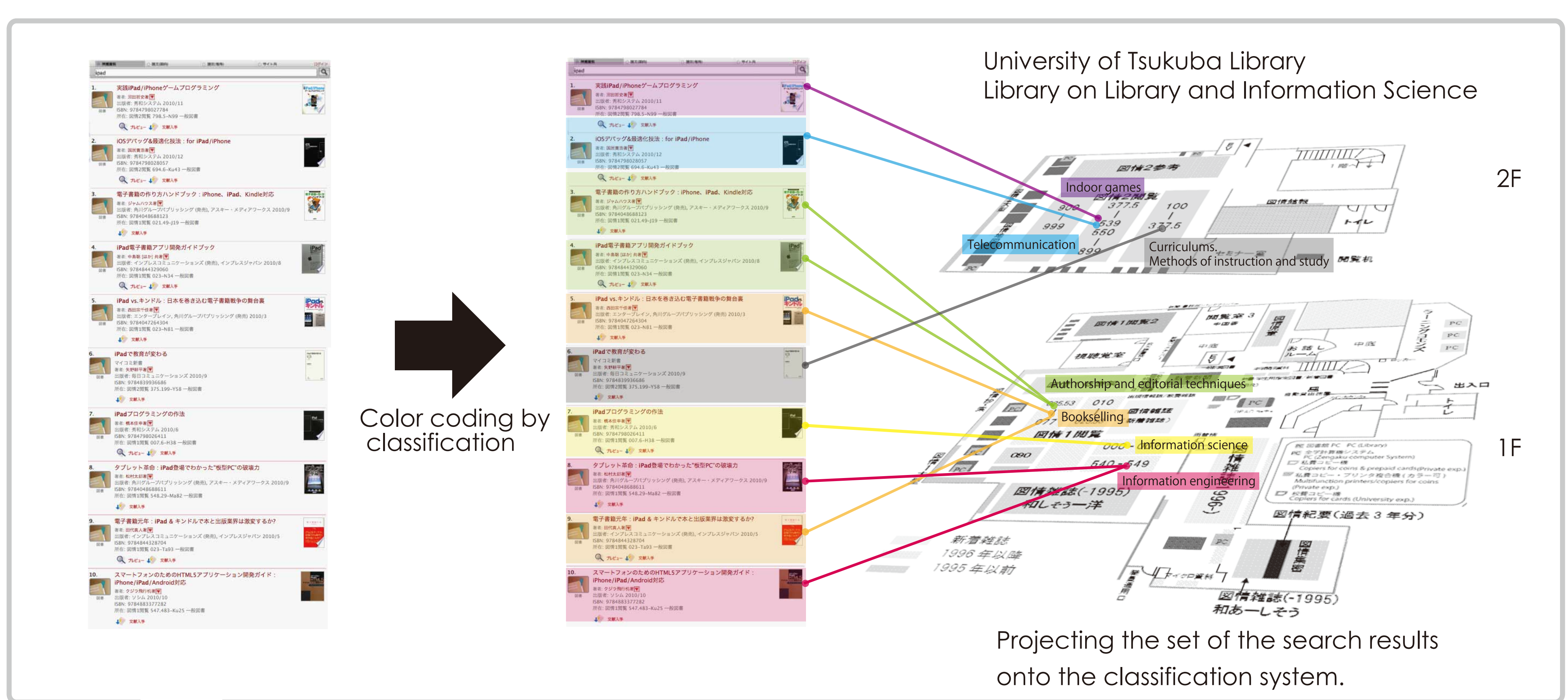
The first system brings the user's knowledge structure close to an expert's knowledge structure by using the knowledge system on which consensus is reached to some extent among experts.
The second system changes the user's knowledge structure according to the classification system by using the library classification for the information the system presents and projecting the set of the search results onto the classification system.

Access to the manuscripts in research institutions

1. We aim to improve the access to the manuscripts of Japanese classical literature, critical editions and papers in research institutions.
2. We link classification of the manuscripts with the manuscript's images on the web, papers and critical editions.
3. Currently, many experts (researchers of Japanese literature) pack information about classification of manuscripts and the bibliography into a book. So, we must markup the text.
4. We have just started to study the possibility of using TEI to mark up the bibliography.



Access to the books or journals in university libraries



What's Tanabota?

Tanabota is a mapping system of OPAC searching results onto a library map. The searching results appear on each shelf in the library, so you can find a group of literatures on each different subjects.



This is an example of a screen appear as the searching result using "iPad" as a query. By looking at the screen, the user easily understands that the result includes various subjects like "Bookselling", "Information science", "Information engineering" and so on.

